

April 21, 2016

Via email to: swqs@ecy.wa.gov

Cheryl Niemi
Water Quality Program
Washington Department of Ecology

RE: Proposed Rule Amendment to Water Quality Standards for Surface Waters of the State of Washington (Chapter 173-201A WAC)

The Northwest Food Processors Association (NWFP) submits the following comments on the *Proposed Rule Amendment to Water Quality Standards for Surface Waters of the State of Washington (Chapter 173-201A WAC)*. In addition, NWFP endorses the comment package submitted by Northwest Pulp and Paper Association and other co-signers.¹¹

NWFP represents food processing companies in Washington regulated by permits under the National Pollutant Discharge Elimination System (NPDES). The human health criteria adopted as part of the Water Quality Standards are of direct interest to food processors' operations in the State of Washington.

Fish Consumption Rate

The proposed rule sets a fish consumption rate at 175 grams per day and is based on local "highly exposed populations" rather than the general population. The methods used and the decisions made by the Department of Ecology result in a rate that represents a value of nearly the 95th percentile of the highest consumers in the state. This consumption rate represents a policy decision rather than a current state-wide survey of fish consumption or current survey of highly-exposed populations.² NWFP is concerned about the data used to determine the fish consumption rate—the quality of surveys, age of surveys, as well as the assumption that short-term dietary surveys reflect long-term dietary behaviors. In 2012, JR Simplot Company submitted to Ecology a review of the fish consumption rates technical Support Document by Arcadis, identifying concerns with the fish consumption studies being used to assess fish consumption.³

¹ "Northwest Pulp & Paper Association Comments on Draft Human Health Water Quality Criteria for the State of Washington," submitted by Chris McCabe, April 22, 2016.

² *Washington State Water Quality Standards: Human health criteria and implementation tools—Overview of key decisions in rule amendment* at 20 (January 2016). The January 2015 version of this document at page 16 indicates that the decision is based on input from Governor Inslee. Both documents reference the Governor's news release.

³ Arcadis U.S., Inc., *Review of Fish Consumption Surveys for Ambient Water Quality Criteria Rulemaking in Idaho*, prepared for J.R. Simplot Company (November 2012).

NWFPA does not support the inclusion of all fish and shellfish--regardless of sources and including anadromous fish. A foundational assumption in this rulemaking is that Washington's water quality standards influence the contaminant levels in water and fish. When considering the different sources of fish consumed by Washington residents, questions arise as to where these fish acquire contaminants and can Washington rules change the levels of contaminants in these fish.

Ecology has chosen to include "all fish and shellfish (which includes the additional protective step of including local and non-local sources, such as salmon, restaurant, locally caught, imported, and from other sources)." Washington's regulations will have no effect on contaminant levels in some of these fish and shellfish and minimal impact to fish such as salmon. Salmon species spend months to a year in freshwater and three to five years in saltwater habitats. Studies by Cullon et al. indicate that 97% to 99% of the body burdens of several persistent bioaccumulative toxins were acquired during the time at sea.⁴ While there is clearly consumer exposure to contaminants from market and non-resident fish, including them in the fish consumption rate (with the resulting toxics substances criteria) places the burden of contaminants in these fish on Washington dischargers. This would expand the scope of what the Clean Water Act is expected to control.

Risk Level

The choice of risk level is a policy decision of the state. However, NWFPA believes that the proposed 10^{-6} risk level, and application to an average fish consumption rate for highly exposed populations instead of the general population, is over-protective and not consistent with EPA guidance or evidence in the record. In its 2000 guidance, EPA states that it believes that both 10^{-6} and 10^{-5} may be acceptable risk levels for the general population and that highly exposed populations should not exceed a 10^{-4} risk level.⁵

When the proposed risk level is applied to the proposed fish consumption rate, the resulting numeric criteria are significantly more stringent than the current National Toxic Rule criteria and exceed the levels necessary to protect public health. These levels are, however, more stringent than the allowable risk levels EPA uses in its safe drinking water regulations. It is also extremely conservative when applied to the general population of Washington State, who most likely consume much less than 175 grams per day and would be protected at a level of about 10^{-8} .

The concept of 10^{-6} was originally developed by the U.S. Food and Drug Administration as a screening level of "essentially zero," or *de minimus* risk—in other words, a level of risk considered below regulatory concern. At some point, a level of risk that was considered to be "essentially zero" has come to be identified for many as a maximum level of acceptable risk.⁶

Arcadis has pointed out in its comments to the state of Idaho (that "in general, the range of allowable risks for the general population typically used to set AWQC (i.e., 10^{-6} and 10^{-5}) are much smaller than the

⁴ Cullon, D.L., Yunker, M.B., Alleyne, C., Dangerfield, N.J., O'Neill, S., Whitcar, M.J., and Ross, P.S. *Persistent organic pollutants in Chinook salmon (Oncorhynchus tshawytscha): Implications for resident killer whales of British Columbia and adjacent waters*. Environmental Toxicology and Chemistry 28(1):148-161. (2009).

⁵ U.S. Environmental Protection Agency. *Methodology for Deriving Ambient Water Quality Criteria for the Protection of Human Health*. (2000)

⁶ State of Idaho Department of Environmental Quality, *Idaho Fish Consumption Rate and Human Health Water Quality Criteria—Discussion Paper #7*. (December 2014).

daily risks we encounter simply by being alive (such as the daily risk of dying from an unnatural cause such as a fall or other accident) or activities we partake in on a regular basis (e.g., walking, driving a car, running)". Arcadis presents data on these other risks and conclude that "these comparisons support the notion that the risks of 1×10^{-6} and 1×10^{-5} and even greater can be considered acceptable for the general population".⁷

Relative Source Contribution

NWFPA agrees with Ecology's proposed use of an RSC of 1.0. The scope of the Clean Water Act is to address potential exposures from NPDES. Use of an RSC less than 1.0 would expand this scope.

Intake Credits

NWFPA supports inclusion of intake credits to provide regulatory relief to dischargers who are subject to background pollutants.

Variances

NWFPA supports inclusion of a specific process for obtaining and maintaining a variance to comply with the Clean Water Act. We are concerned about the resource burdens these new regulations may pose to NPDES permittees. However given the stringency of the new criteria, variances may be a necessary implementation tool for many permittees.

Thank you for the opportunities you have provided to stakeholders to participate in the public process and to comment on the proposed rule.

Sincerely,



Pamela Barrow
Vice President, Energy, Environmental & Sustainability

⁷ Arcadis U.S., Inc., *White Paper Responding to the Idaho Fish Consumption Rate and Human Water Quality Criteria—Discussion Paper #7: Risk Management and Protection of Human Health*. (January 20, 2015). IACI comments to Idaho Department of Environmental Quality on Idaho's Revised Human Health Toxic Criteria, (November 6, 2015) indicate the following lifetime risk of death: lightning $10^{-6} - 10^{-5}$; cataclysmic storm 10^{-4} ; homicide $10^{-3} - 10^{-2}$; flu 10^{-2} ; all accidents $10^{-2} - 10^{-1}$; cancer or heart disease 10^{-1} .